

Fact Sheet



For Final Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: R30-NGGP-2007

Natural Gas Compressor Facilities General Permit

Facility Description

This General Permit is for facilities designed and operated for the purpose of gathering, dehydrating, transmitting, processing or compressing natural gas and is included in SIC code 1311, 1321 & 4922. The General Permit language will be same for all facilities that want to use this permit. The Registration forms will be different for each facility. The Registration form shall list all emission sources and sections of the general permit, which are applicable to the particular facility.

Advantages of General Permit over individual Permits:

1. Permits are streamlined – The General Permit provides more uniformity between permits for different facilities which translates into consistent compliance measures that should help companies with numerous sources.
2. The registration under General Permit will not involve advertisement. This will save permitting process time.
3. Modifications will be easier and faster. For example, if equipment is added which is similar to equipment covered by the General Permit, the permittee will only be required to submit a modification request to add the new equipment to their registration. No advertisement will be required.

To apply for Registration permittee shall do the following:

- Request for Registration under General Permit R30-NGGP-2007.
- If a source has submitted an Air 4 application then submit:
 - Updates using new Title V application forms; in the equipment table, mention which sections of General Permit is applicable to the facility and each individual equipment.
- If a source has not submitted an Air 4 application or submitted new Title V application forms then submit:
 - New Title V application forms; in the equipment table, mention which sections of General Permit is applicable to the facility and each individual equipment;

Title V Program Applicability Basis

Due to this facility's potential to emit over 100 tons per year of criteria pollutant and/or over 10 tons per year of a single HAP and/or over 25 tons per year of aggregate HAPs, the Facility is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This eligible facility may be subject to the following applicable rules as specified in the Registration:

Federal and State:	45CSR1	NOx Budget Trading Program
	45CSR2	Particulate Air Pollution from Indirect Heat Exchangers
	45CSR6	Open burning prohibited.
	45CSR10	Emission of Sulfur Oxides
	45CSR11	Standby plans for emergency episodes.
	45CSR13	
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 60, Subpart GG	Turbine NSPS
	40 C.F.R. Part 60, Subpart KKK	Natural Gas Processing Plant NSPS
	40 C.F.R. Part 60, Subpart K,Ka,Kb	Storage Vessel NSPS
	40 C.F.R. Part 60, Subpart Dc	Small Steam Generating Units NSPS
	40 C.F.R. Part 63, Subpart HHH	Natural Gas Transmission Facility which are major sources of HAPs
	40 C.F.R. Part 63, Subpart DDDDD	Boilers & Process Heaters located at Major Source of HAPs
	40 C.F.R. Part 63, Subpart ZZZZ	Stationary RICE located at Major Source of HAPs
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	Fugitive Particulate emissions

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

Active Permits/Consent Orders: Please see the registration

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B which may be downloaded from DAQ's website.

Determinations and Justifications

1. According to the following calculation, compliance with FERC (Federal Energy Regulatory Commission) limit for total sulfur of 20 grains/100 cu.ft will assure compliance with 45CSR10 limit of 2000 ppm SO₂:

$$(20 \text{ grains of S} / 100 \text{ cu.ft of gas}) \times (1 \text{ lb} / 7000 \text{ grains}) \times (1 \text{ lbmol S} / 32 \text{ lb S}) \times (1 \text{ lbmol SO}_2 / 1 \text{ lbmol S}) \times (385.1 \text{ cu.ft of gas} / 1 \text{ lbmol gas}) \times 10^6 = 343 \text{ ppm of SO}_2$$

Compliance with FERC limit for H₂S of 0.25 grains/100 cu.ft will assure compliance with 45CSR10 limit of 50 grains/100 cu.ft.

2. Pipeline quality natural gas has very low H₂S content and total sulfur includes H₂S. Hence H₂S is not required to be tested at the inlet gas stream.

3. According to 45CSR2 & 45CSR2A Miscellaneous Indirect Heat Exchangers including Reboilers and Regeneration Gas Heaters < 100 MMBtu/hr do not require monitoring and testing frequencies to show compliance with opacity limit.

4. From various field data it is evident that Glycol Dehydration unit does not extract any sulfur from the natural gas stream. Therefore if the incoming Pipeline Natural gas meets FERC limit it is sufficient to show compliance of glycol dehy unit with 45CSR10 limit of 2000ppm SO₂.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

45CSR27 *To Prevent and Control the Emissions of Toxic Air Pollutants*. Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment “used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight.”

45CSR§6-7.1 is not applicable to a flare because burning natural gas and flare design according to 40CFR60.18 or 40CFR63.11 produces a minimal amount of particulate matter. Section 12.2.4 of the permit states that compliance with PM-10 emission limitation can be calculated by using emission factors.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: April 27, 2007

Ending Date: May 29, 2007

All written comments should be addressed to the following individual and office:

U.K.Bachhawat
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

U.K.Bachhawat
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499, Ext 1256 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

There were no comments received.

The following changes have been made to the final permit:

1. In Section 12.2.2 “Compliance with the emission limits set forth in General Permit Registration for NO_x, CO, VOC, SO₂ and PM₁₀.....” was changed to “Compliance with the emission limits set forth in General Permit Registration for NO_x, CO, VOC, SO₂, **applicable HAPs** and PM₁₀.....”.
2. In Section 12.5.1 “If permittee is required by the Director to demonstrate.....” was changed to “If permittee is required by the Director **or chooses** to demonstrate.....”.